REMARKS

In the Office Action the Examiner rejected the pending Claims under 35 U.S.C. 102(b) as being anticipated by USP 4,075,846 to Li. In response Claims 1 through 9, 16 through 19 have been canceled. Claim 10 has been amended. Claim 20 through 22 have been newly added. Claims 10 -15 and 20 -22 are pending in this application.

USP '846 to Li discloses a thermal engine having two drums each having a pair of pulleys, a pair of belts for connecting said pulleys, the first belt being unyieldable and a second belt made of shape memory alloy. The output of the device is rotary power. The Li reference, the Krumme et al, Wyaman, Pachter and the new uncovered references to Cory (USP 4,305,250) or Wang (USP 4,275,561) disclose a system for providing rotary power.

The present invention as now claimed is a system of three drums and several pulleys interconnected by a belt. One of the drums is allowed t move laterally towards and away from the other drums. Another drum functions to take up and release slack in the belt. Heating a portion of the belt interconnecting these drums and pulleys causes that portion of the belt to expand and move the drum capable of lateral movement to function as a classic chain fall having linear actuation. This supported in paragraph four and the discussion surrounding Figure 2 which starts at paragraph 28 and continues through paragraph 29. Claim 10 has been amended to claim this feature. Claims 11 through 15 remain dependent on this revised independent claim. Claim 20 is a new dependent claim based this limitation.

None of the cited art references uses a regenerative heat exchanger. Disclosed in paragraph 16 as part of the description of Figure 3 and claimed in the present invention is

the use of a regenerative heat exchanger. This novel technique is a patentable feature of the present invention. Claim 21 incorporates this limitation into independent claim 10.

Claim 22 is a rewritten independent claim combining the limitations of both claim 20 and 21 in independent form.

Applicant believes that all pending claims are in condition for allowance and such disposition is respectfully requested. I the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully Submitted,

Date: October 26, 2004

Mark A. Wurm, Esq.

Lockheed Martin Corporation

9500 Godwin Drive

MS: 400/043

Manassas, VA 20110

(703) 367-2128

mark.a.wurm@lmco.com